	Application No.	Applicant(s)
Notice of Allowability	09/976,477	HAWKINS ET AL.
	Examiner	Art Unit	
	Ting Zhou	2173	.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to <u>10 September 2004</u>.

2. ☒ The allowed claim(s) is/are <u>1, 4-37, 40-51, 66-89, 102-114, 120-123, 130-133 and 140-145</u>.

3. ☒ The drawings filed on <u>12 October 2001</u> are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

    Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date <u>7/15/04, 9/23/04</u>

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

EXAMINER'S AMENDMENT

1.   The amendment filed on 10 September 2004 have been received and entered. The

applicants have cancelled claims 3, 38, 39, 56-58, 60-62, 92-94, 96-98 and 115-117 and added

claims 120-147. Claims 1, 2, 4-37, 40-55, 59, 63-91, 95, 99-114 and 118-147 as amended are

pending in the application.

2.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

   Authorization for this examiner's amendment was given in a telephone interview with

Mr. Amir H. Raubvogel (Reg. No. 37,070) on 16 December 2004.

3.   The application has been amended as follows:

4.   Claim 1 is amended to read:

Claim 1. A computer-implemented method for concurrently accepting parameters in at least two

contexts, the method comprising:

   accepting a keystroke sequence comprising at least one keystroke, each keystroke having

a first value, and at least one keystroke having a second value;

   determining whether the keystroke sequence produces a valid result in a first context;

responsive to the keystroke sequence producing a valid result in the first context:

outputting first feedback, the first feedback indicating keystroke input according

to the first context; and

performing a first action corresponding to the first context, using the first value

for each keystroke;

responsive to the keystroke sequence not producing a valid result in the first context:

determining whether the keystroke sequence produces a valid result in a second context;

and

responsive to the keystroke sequence producing a valid result in the second context:

outputting second feedback, the second feedback indicating keystroke input

according to the second context; and

performing a second action corresponding to the second context, using the second

value for each keystroke.

5.   Claim 3 is cancelled.

6.   Claim 37 is amended to read:

Claim 37. A computer-implemented method for concurrently accepting parameters in at least

two contexts, the method comprising:

accepting a keystroke sequence comprising at least one keystroke, each keystroke having

a first value, and at least one keystroke having a second value;

determining whether the keystroke sequence produces a valid result in a first context;

responsive to the keystroke sequence producing a valid result in the first context:

outputting first feedback, the first feedback indicating keystroke input according

to the first context; and

performing a first action corresponding to the first context, using the first value

for each keystroke;

responsive to the keystroke sequence not producing a valid result in the first context:

determining whether the keystroke sequence produces a valid result in a second context;

and

responsive to the keystroke sequence producing a valid result in the second context:

outputting second feedback, the second feedback indicating keystroke input

according to the second context; and

performing a second action corresponding to the second context, using the second

value for each keystroke.

7.   Claim 46 is amended to read:

Claim 46. The method of claim 37, further comprising:

accepting an additional keystroke, the additional keystroke having at least a first value;

appending the additional keystroke to the keystroke sequence;

repeating the steps of determining whether the keystroke sequence produces a valid result

in a first context, and responsive to the key-stroke sequence producing a valid result in the first

context, outputting first feedback, the first feedback indicating keystroke input according to the

first context; and

repeating the steps of responsive to the keystroke sequence not producing a valid result in

the first context, determining whether the keystroke sequence produces a valid result in a second

context, and, responsive to the keystroke sequence producing a valid result in the second context,

outputting second feedback concurrently with the first feedback, the second feedback indicating

keystroke input according to the second context.

8.   Claim 47 is amended to read:

Claim 47. The method of claim 37, further comprising:

        accepting a backspace keystroke;

        deleting a keystroke from the keystroke sequence;

        repeating the steps of determining whether the keystroke sequence produces a valid result

in a first context, and, responsive to the key-stroke sequence producing a valid result in the first

context, outputting first feedback, the first feedback indicating keystroke input according to the

first context; and

        repeating the steps of responsive to the keystroke sequence not producing a valid result in

the first context, determining whether the keystroke sequence produces a valid result in a second

context, and, responsive to the keystroke sequence producing a valid result in the second context,

outputting second feedback concurrently with the first feedback, the second feedback indicating

keystroke input according to the second context.

9.   Claims 52-55 are cancelled.

10.   Claim 59 is cancelled.

11.   Claims 63-65 are cancelled.

12.   Claim 66 is amended to read:

Claim 66. A system for concurrently accepting parameters in at least two contexts, the system comprising:

a character input device comprising a plurality of character input device elements, each character input device element having a first value, and at least a subset of the character input device elements having a second value;

a buffer, coupled to the character input device, for storing a keystroke sequence entered on the character input device, the keystroke sequence comprising at least one keystroke;

a string handler, coupled to the buffer, for determining whether the keystroke sequence produces a valid result in a first context and for determining whether all of the keystrokes are valid in a second context;

an output device, coupled to the string handler, for:

responsive to the keystroke sequence producing a valid result in the first context, outputting first feedback, the first feedback indicating keystroke input according to the first context; and

responsive to the keystroke sequence not producing a valid result in the first context and producing a valid result in the second context, outputting second feedback, the second feedback indicating keystroke input according to the second context; and

a processor, coupled to the string handler, for:

responsive to the keystroke sequence producing a valid result in the first context,

performing a first action corresponding to the first context, using the first value for each key-

stroke; and

responsive to the keystroke sequence not producing a valid result in the first

context and producing a valid result in the second context, performing a second action

corresponding to the second context, using the second value for each keystroke.

13.   Claim 67 is amended to read:

Claim 67. The system of claim 66, wherein the processor comprises:

a directory lookup engine and a dialer, and wherein the first action comprises retrieving a

telephone number from a directory record identified by the first value for each keystroke and

dialing the retrieved telephone number.

14.   Claim 68 is amended to read:

Claim 68. The system of claim 66, wherein the processor comprises

a dialer, coupled to the string handler, and wherein the second action comprises dialing a

telephone number specified by the second value for each keystroke.

15.   Claim 82 is amended to read:

Claim 82. A system for concurrently accepting parameters in at least two contexts, the system

comprising:

a character input device comprising a plurality of character input devices, each character input device having a first value, and at least a subset of the character input devices having a second value;

a buffer, coupled to the character input device, for storing a keystroke sequence entered on the character input device, the keystroke sequence comprising at least one keystroke;

a string handler, coupled to the buffer, for determining whether the keystroke sequence produces a valid result in a first context and for determining whether all of the keystrokes are valid in a second context;

an output device, coupled to the string handler, for:

responsive to the keystroke sequence producing a valid result in the first context, outputting first feedback, the first feedback indicating keystroke input according to the first context; and

responsive to the keystroke sequence producing a valid result in the second context and not producing a valid result in the first context, outputting second feedback, the second feedback indicating keystroke input according to the second context;

responsive to the keystroke sequence producing a valid result in both the first and second contexts, outputting first and second feedback concurrently, the first feedback indicating keystroke input according to the first context and the second feedback indicating keystroke input according to the second context;

wherein, responsive to the keystroke sequence producing a valid result in the first context, the system performs a first action corresponding to the first context, using the first value for each keystroke; and

wherein, responsive to the keystroke sequence producing a valid result in the second

context, the system performs a second action corresponding to the second context, using the

second value for each keystroke; and

wherein, responsive to the keystroke sequence producing a valid result in both the first

and second contexts, the system performs a first action corresponding to the first context, using

the first value for each keystroke, and a second action corresponding to the second context, using

the second value for each keystroke.

16.   Claims 90-91 are cancelled.

17.   Claim 95 is cancelled.

18.   Claims 99-101 are cancelled.

19.   Claim 102 is amended to read:

Claim 102. A computer program product comprising a computer-usable medium having

computer-readable code embodied therein for concurrently accepting parameters in at least two

contexts, the computer program product comprising:

computer-readable program code configured to cause a computer to accept a keystroke

sequence comprising at least one keystroke, each keystroke having a first value, and at least one

keystroke having a second value;

computer-readable program code configured to cause a computer to determine whether the keystroke sequence produces a valid result in a first context;

computer-readable program code configured to cause a computer to, responsive to the keystroke sequence producing a valid result in the first context:

output first feedback, the first feedback indicating keystroke input according to the first context; and

perform a first action corresponding to the first context, using the first value for each keystroke;

computer-readable program code configured to cause a computer to, responsive to the keystroke sequence not producing a valid result in the first context:

determine whether the keystroke sequence produces a valid result in a second context; and

responsive to the keystroke sequence producing a valid result in the second context:

output second feedback, the second feedback indicating keystroke input according to the second context;

and

perform a second action corresponding to the second context, using the second value for each keystroke.

20.   Claim 104 is amended to read:

Claim 104. The computer program product of claim 103, wherein:

the computer-readable program code configured to cause a computer to perform a first

action corresponding to the first context comprises computer-readable program code configured

to cause a computer to perform the directory filtering operation using the first value for each of

the accepted keystrokes.

21.   Claim 111 is amended to read:

Claim 111. A computer program product comprising a computer-usable medium having

computer-readable code embodied therein for concurrently accepting parameters in at least two

contexts, the computer program product comprising:

computer-readable program code configured to cause a computer to accept a keystroke

sequence comprising at least one keystroke, each keystroke having a first value, and at least one

keystroke having a second value;

computer-readable program code configured to cause a computer to determine whether

the keystroke sequence produces a valid result in a first context;

computer-readable program code configured to cause a computer to, responsive to the

keystroke sequence producing a valid result in the first context, output first feedback, the first

feedback indicating keystroke input according to the first context, and to perform a first action

corresponding to the first context, using the first value for each keystroke;

computer-readable program code configured to cause a computer to, responsive to the

keystroke sequence not producing a valid result in the first context:

determine whether the keystroke sequence produces a valid result in a second

context; and

responsive to the keystroke sequence producing a valid result in the second

context, output second feedback, the second feedback indicating keystroke input according to the

second context, and to perform a second action corresponding to the second context, using the

second value for each keystroke.

22.   Claims 118-119 are cancelled.

23.   Claims 124-129 are cancelled.

24.   Claims 134-139 are cancelled.

25.   Claims 146-147 are cancelled.

REASON FOR ALLOWANCE

26.   The following is an examiner's statement of reasons for allowance: The present invention

teaches multi-context directory filtering techniques that concurrently accepts parameters in at

least two contexts and filters a directory using the values of the two contexts. Each independent

claim identifies the distinct feature of "responsive to the keystroke sequence producing a valid

result in the first context: outputting first feedback, the first feedback indicating keystroke input

according to the first context, and performing a first action corresponding to the first context,

using the first value for each keystroke; responsive to the keystroke sequence not producing a

valid result in the first context: determining whether the keystroke sequence produces a valid

result in a second context, and responsive to the keystroke sequence producing a valid result in

the second context: outputting second feedback, the second feedback indicating keystroke input

according to the second context; and performing a second action corresponding to the second

context, using the second value for each keystroke". The closest prior art, Grover et al. U.S.

Patent 5,818,437, teaches techniques for implementing a reduced keyboard wherein a plurality of

letters and symbols are assigned to most of the keys; when more than one word matches an

entered keystroke sequence, a menu from which the user selects the desired word is presented.

The prior art fails to teach in response to the keystroke sequence producing a valid result in the

first context, performing a first action corresponding to a first context using the first value for

each keystroke, and in response to the keystroke sequence not producing a valid result in the first

context, determining whether the keystroke sequence produces a valid result in the second

context and if the keystroke sequence does produce a valid result in the second context,

performing a second action corresponding to the second context, using the second value for each

keystroke. Thus, the prior art fails to anticipate or render the above limitations obvious.

27.   Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for
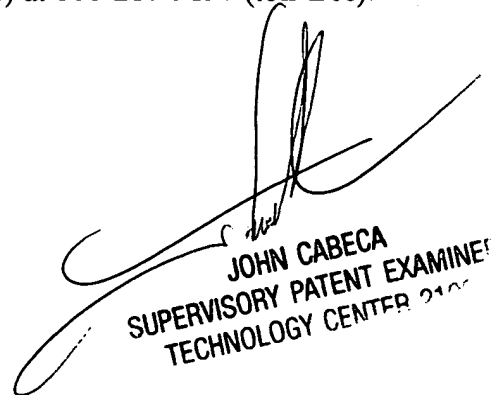
Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (571) 272-4058. The examiner can normally be reached on Monday - Friday 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached at (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-4058.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6 January 2005

JOHN CABECA
SUPERVISORY PATENT EXAMINE
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